

Work Order ID 134258-1

134258

Page 1

Wednesday, July 08, 2015 3:05:39 PM

Item ID: D3197-041

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Bar

Start Date: 7/07/15

Start Qty: 200

2

5x

Cust Item ID:

Required Date: 7/07/15

Req'd Qty: 200

2

Customer:

Reference:

Approvals:

Process Plan: MLS

Date: JUL 09 2015

Tooling:

Date:

Run

Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr

Revision Nbr

D3197

Rev B

100

0.00

100

BAND SAW

Bandsaw

Memo

0.00

Jeaspa Bandsaw

Cut blanks: 29.125" long

DAS
25
9-89

110

0.00

110

HAAS CNC VERTICAL MACHINING #1

HAAS 1

Memo

0.02

HAAS CNC vertical machine #1

1-Face ends to length per dwg D31972-Machine D3197-1 as per Folio FA340
and Dwg D31973-DeburrDAS
25
9-89

120

0.00

120

QC2- Inspect parts off machine FAI/FAIB

QC

Memo

0.00

Quality Control

DAS
25
9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER :							
Misidentified ☐	Past Due ☐								

Work Order ID 134258

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134258

Page 2

Item ID: D3197-041 Accept ***N900040100*** Setup Start ***NS1***
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Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130		0.00							
130	CONVENTIONAL LATHE								
Lathe Conv	Memo	0.00				6			SL/57-20
Conventional Lathe	Chamfer as per Dwg D3197								
140		0.00							
140	QC8- Inspect parts - second check								
QC	Memo	0.00				6	0		JFC 20508-04
Quality Control									
150		0.00							
150	Chemical Conversion Coat per QSI005 4.1								
HandFinish	Memo	0.00				6x			15/08/04
Hand Finishing									

DAS
36
8-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

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Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160	Grey Sandtex(Ref:4.3.5.6) per QSI005 4.3	0.00							
160									
Powdercoat									
Powder Coating	Memo START TIME: <u>1:30pm</u> FINISH TIME: <u>2:00pm</u> OVEN TEMPERATURE: <u>200pm</u>	0.00							6x p 11/10/05
170	QC3- Inspect Part Finish	0.00							
170									
QC	Memo	0.00							6x 15/08/05
Quality Control									
180	Small Fab	0.00							
180									
Small Fab	Memo	0.01							5x 15/08/05
Small Fab	Assemble D3197-041 as per Dwg D3197								

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Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
190	QC5- Inspect part completeness to step on W/O	0.00							DAB 38 9-89
190						(5)			
QC	Memo	0.00							
Quality Control									AUG 07 2015
200	Identify as per dwg & Stock Location: <u>st28</u>	0.00							
200						S			
Packaging	Memo	0.00							DAB 27 9-89
Packaging									
									AUG 12 2015
210	QC21- Final Inspection - Work Order Release	0.00							
210									
QC	Memo	0.00							
Quality Control						MLJ			AUG 12 2015

MLJ AUG 12 2015

DQA: _____ Date: _____



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Picklist Print

Wednesday, July 08, 2015 3:05:38 PM

Page 1

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Work Order ID: 134258

134258

Parent Item: D3197-041

D3197-041

Parent Item Name: Bar

Start Date: 7/07/15

Required Date: 7/07/15

Start Qty: 2.00

Required Qty: 2.00

Comments: IPP Rev: A New Issue 05-11-08 JLM
IPP Rev: B As per Rev B 06-03-10 JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D2690-5 *D2690-5* Lanyard Assembly		Manufactured	No			180	Each	18.0000	2	4		15/08/05	DAS 36 9-89
				<u>Location</u>				<u>Loc Qty</u>					
				ST012a				18					
				119601				12					
				124411				6					
D3242-1 *D3242-1* Tag		Manufactured	No			180	Each	22.0000	2	4		15/08/05	DAS 36 9-89
				<u>Location</u>				<u>Loc Qty</u>					
				GA				22					
				119565				2					
				129592				20					
D3489-3-200 *D3489-3-200* Pip Pin		Manufactured	No			180	Each	12.0000	2	4		15/08/05	DAS 36 9-89
				<u>Location</u>				<u>Loc Qty</u>					
				GA				12					
				119335				10					
				120097				2					
M7075T73R1.000 *M7075T73R1 000* 7075-T73 Rd Bar 1.00		Purchased	No			180	f	38.0370	2.42	7		14.625 1/54-29	
				<u>Location</u>				<u>Loc Qty</u>					
				MAT018				38.037					
				m127647				38.037					

B135073 (90)

3

10

102

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation			Disposition		
			Completed By		
			Lead hand / Supervisor Approval Verification		
			QC / QA Coordinator Approval		
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER : _____					

Picklist Print

Wednesday, July 08, 2015 3:05:38 PM

Page 2

Work Order ID: 134258

134258

Parent Item: D3197-041

D3197-041

Parent Item Name: Bar

Start Date: 7/07/15

Required Date: 7/07/15

Start Qty: 2.00

Required Qty: 2.00

MS21042L3

Purchased

No

180

Each

1,445.000

2

4

MS21042L3

Nut

15/08/05

DAS
36
9-89

Location

Loc Qty

Loc Code

FP001

393

M130922

393

GA

436

M131317

436

ST305

616

116549

12

126333

49

M128401

2

M128754

2

M132123

17

M132382

534

12

MS27039-1-24

Purchased

No

100

Each

55.0000

2

4

MS27039-1-24

Screw

15/08/05

DAS
36
9-89

Location

Loc Qty

Loc Code

GA

15

m127432

15

ST284

40

m127432

40

12

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐							
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval			
Description Work Order Deviation				Disposition				Completed By			
Root Cause				FAULT CATEGORY							
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐		No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐		Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐		Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐		Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐	
OTHER : ☐											

Picklist Print

Wednesday, July 08, 2015 3:05:38 PM

Page 3

Work Order ID: 134258

134258

Parent Item: D3197-041

D3197-041

Parent Item Name: Bar

Start Date: 7/07/15

Required Date: 7/07/15

Start Qty: 2.00

Required Qty: 2.00

NAS1149D0363J

Purchased

No

180

Each

2,109.000

6

12

NAS1149D0363.J

Washer

DAS
36
9-89

15/08/05

Location

Loc Qty

Loc Code

CA

569

m130799

569

GA

1126

m128429

138

m132677

988

ST269

414

m126319

7

m131618

1

m132317

406

36

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QS1042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : ☐					

DART AEROSPACE LTD		Work Order: 134258
Description: Bar		Part Number: D3197-1
Inspection Dwg: D3197	Rev: B	Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

☒

First Article

☐

Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
29.00	+/-0.030	29.00	✓		M-TAPE	SL-8
25.06	+/-0.030	25.06	✓			
11.44	+/-0.030	11.435	✓		Vern	CNC-02
0.500	+/-0.010	0.500	✓			SL-10
0.250	+/-0.030	0.240	✓			
Ø0.219	+0.005/-0.000	0.219	✓			
Ø0.191	+0.005/-0.000	0.193	✓			
1.000	+/-0.005	1.000	✓			
2.69	+/-0.030	2.687	✓			
1.000	+/-0.010	1.000	✓			
0.300	+/-0.010	0.310	✓			
0.063 x 45°	+/-0.010	0.065 x 45°	✓			
Ø1.000	+/-0.010	1.000	✓			

Measured by: JH	Audited by: JH	Prototype Approval: N/A
Date: 15-7-29	Date: 2015-08-04	Date: N/A

Rev	Date	Change	Revised by	Approved
A	04.04.20	New Issue (P/O D3197-041)	KJ/JLM	
B	07.03.09	Dwg revision update	KJ/JLM	BE

ENC 32

NO 134258 MJS
15-07-09

DART



- 1) MATERIAL: 7075-T73 ROUND BAR (QQ-A-200/11 or QQ-A-225/9) ϕ 1.000 O.D.
(REF DART SPEC. M7075T73R1.000)
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT SANDTEX (4.3.5.6) PER DART QSI 005 4.3
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) FOR TOOLING, IT IS ACCEPTABLE TO HAVE A 0.06 DEEP x 60° CENTER MARK AT EITHER
END OF THE BAR

CHECKED		APPROVED	DRAWING NO.	REV. B
			D3197	SHEET 1 OF 1
DATE			TITLE	SCALE
06.01.10			BAR	1:1
A	03.07.01		NEW ISSUE	
B	06.01.10		CHG PIP PIN; ADD D3242-1 TAG	

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